

3.12 LAND AND SHORELINE USE

3.12.1 Affected Environment

The proposal extends through six counties (Snohomish, King, Kittitas, Grant, Adams, and Franklin) and four cities (Snoqualmie, North Bend, Kittitas, and Pasco), primarily through undeveloped land.

3.12.1.1 Existing Land Uses along Pipeline Corridor

General. Most of the pipeline corridor would be located on undeveloped rural land devoted to natural resource uses (forest and recreation) and agricultural uses (rangeland and crops), with the exception of residential areas primarily near the western end of the corridor through Snohomish and King Counties.

Approximately half of the pipeline corridor (47 percent, 176 km or 109 miles) could be located within existing cleared ROW, including the BPA transmission corridor in western Washington, the Cedar Falls Trail and John Wayne Trail (recreation trails), and on USFS and other roads. Approximately one-quarter of the corridor (24 percent, 90 km or 56 miles) would be located immediately adjacent to existing cleared corridors, primarily roadways.

Existing land uses and zoning designations along the pipeline corridor and at the Kittitas Terminal are described and illustrated in the ASC land use section and map atlas (OPL 1998). The following land use categories are used to generally describe the area within 1.6 km (1 mile) on either side of the pipeline corridor: urban and rural residential, forest, agriculture, rangeland, and recreation.

Most of the pipeline corridor crosses unincorporated lands through six counties, but it does pass through four cities (Snoqualmie, North Bend, Kittitas, and Pasco). The portion of the pipeline corridor that extends through Snoqualmie and North Bend has the greatest development and diversity of land uses, including commercial; recreational; and urban, suburban, and rural residential. This segment of the corridor is within the Cedar Falls Trail ROW, a recreation trail managed by King County. The segments of the corridor that extend through Kittitas and Pasco are relatively undeveloped areas of town.

Residential Structures. There are no residential structures within the construction corridor, although the corridor is near some residences and extends through some larger rural residential properties. Although the residences do not directly abut the corridor, they would be within 305 m (1,000 feet) of the centerline.

The corridor utilizes existing cleared ROW in Snohomish County and in the Cities of Snoqualmie, North Bend, and Kittitas, and there are residences near the corridor. In Snohomish County, the construction corridor is located within the existing BPA transmission line ROW, extending through a suburban/rural residential area. In Snoqualmie and North Bend, the construction corridor is located entirely within the existing Cedar Falls Trail ROW, which extends through

urban/suburban residential areas. In Kittitas, the construction corridor is along the John Wayne Trail until turning south (extending along the edge of roadways and cropland) to the Kittitas Terminal.

The pipeline corridor crosses 450 privately owned properties, approximately 90 percent of which are rural residences ranging in size from 0.4 to 16,188 ha (1 to 40,000 acres). The portion of each property crossed ranges from a small portion to miles.

There are five mobile home parks along the pipeline corridor, four in or near North Bend (in King County) and one in Franklin County. Two of the mobile home parks are within 30.5 m (100 feet) of the centerline as identified in the ASC. However, the closest mobile home is approximately 27 m (90 feet) from the centerline.

Non-Residential Structures. The ASC also identifies the proximity of non-residential structures along the pipeline corridor, including churches, schools, motels, medical facilities, and public facilities. All non-residential structures are at least 30.5 m (100 feet) from the centerline (most are over 305 m or 1,000 feet from the centerline). Exceptions include some highway commercial uses (two gas stations and a cafe) adjacent to the Kittitas Terminal, which is near an I-90 interchange.

Construction Staging Areas. Existing land uses at the 6 to 12 ha (15- to 30-acre) pipe staging areas and 4 to 8 ha (10- to 20-acre) contractor construction yards are not specifically known because the locations have not been finalized. However, candidate sites include graded or paved log storage yards or similar industrial uses. The final sites would be located on areas already disturbed and not adjacent to any sensitive land uses (i.e., residents and schools) or sensitive natural resources (i.e., creeks). The ASC specifies that the staging areas would be located adjacent to active or refurbished rail sidings.

Existing Land Uses in Columbia River Vicinity. Several pipeline options are being considered at the Columbia River crossing. Major areas through which the corridor could cross include the Yakima Training Center and Ginkgo Petrified Forest State Park on the west side of the river.

The proposed pipeline corridor would cross Ginkgo Petrified Forest State Park, which consists of approximately 3,238 ha (8,000 acres) located on the west side of the Columbia River and on both the north and south sides of I-90 (Figure 3.12-1). The state park is primarily undeveloped land covered with scrub vegetation. The terrain is hilly and steep in many parts, except along the river where it is generally flat. Developed facilities include the state park interpretive center, approximately 1.6 km (1 mile) north of I-90, and the Wanapum Recreation Area, approximately 3 to 5 km (2 to 3 miles) south of I-90. The interpretive center includes a museum and trails (paved/unpaved) which demonstrate exhibits of petrified forest. The Wanapum Recreation Area includes a campground with 50 sites, facilities, picnic area, and boat launch. South of the state park is Getty's Cove Camp and RV Park, a privately owned facility with 120 sites and watercraft rental. (Carter pers. comm.)

The 131,932 ha (326,000-acre) Yakima Training Center (YTC), which is owned and operated by the U.S. Army, is located south of I-90 and west of the Columbia River and Ginkgo Petrified Forest State Park. Alternative routes for the pipeline could traverse the YTC (Figure 3.12-1). The U.S. Army expanded the 106,841 ha (264,000-acre) historical YTC in 1992 by 25,091 ha (62,000

acres) to acquire the northern expansion area, including the property affected by possible alternate routes for the pipeline. The northern expansion area remained in use for open livestock grazing until April 1997 when the Army began training and maneuvers. The northern expansion area, like most of the property, is used for training exercises and covered with shrub-steppe vegetation. Training activities, which extend as far north as the I-90 boundary, include infantry training and mock battles with mechanized tanks and other fighting equipment. Continued future use of these areas for training maneuvers is planned. (Krueger pers. comm.)

3.12.1.2 Existing Land Uses at Pump Station and Kittitas Terminal Sites

Table 3.12-1 presents the existing land uses and zoning at the proposed above-ground structures (six pump stations and storage/distribution facility), as well as the adjacent land uses. All the sites are undeveloped. There are no residences directly adjacent to the pump station sites, although there are some residences near (i.e., within 305 m or 1,000 feet) the Thrasher and North Bend Pump Station sites.

The Thrasher site in Snohomish County is under transmission lines within cleared BPA ROW, situated on Maltby Road and surrounded by rural/suburban residential (much of it forested) (Figure 3.12-2). The closest residence to the Thrasher Pump Station site is north of the station across Maltby Road.

The North Bend site is undeveloped and covered with grasses and blackberry bushes, surrounded by undeveloped land, the Cedar Falls Trail, Puget Sound Energy's North Bend Substation, and the USFS North Bend Ranger Station (Figure 3.12-3). The closest residences to the North Bend site are located west of the station across Thrasher Road (Figure 3.12-3). The pump station site and the adjacent area to the west/northwest are currently undeveloped, unincorporated land zoned by the county for regional business. However, it is within the city's urban growth area (UGA) and shown on the city's zoning map as low-density residential (formerly general commercial).

The Kittitas Terminal site is in agricultural use. Adjacent uses include agriculture to the north and east, the I-90 interchange to the south, and highway commercial (two gas stations and a cafe) to the west. The area is transitioning from agricultural to commercial use as the City of Kittitas develops south toward the freeway (Figure 3.12-4).

The Stampede, Beverly-Burke, and Othello Pump Station sites are undeveloped land adjacent to undeveloped land. The Stampede Station would be located on a site owned by OPL. It is a clearing surrounded by Wenatchee National Forest lands. The site is triangular-shaped, with Stampede Pass Road adjacent on one side, the John Wayne Trail adjacent on the other, and a telephone utility repeater station (small structure) to the north. The John Wayne Trail, which is an unimproved, abandoned railroad bed in most places, is in the early stages of development. Some locations have been improved for public access and vegetation cleared to facilitate working and biking. The trail includes the Snoqualmie Tunnel which is closed in winter.

Table 3.12-1. Existing Land Uses Onsite and Adjacent to Pump Stations and Terminal

Above-Ground Structure	Existing Land Use/Zoning	Adjacent Existing Land Use
Thrasher Pump Station 3.67 acres - Segment 1) See Figure 3.12-2	Vacant/undeveloped with some shrubs within BPA ROW (under transmission lines). Snohomish County Zoning: suburban agriculture.	Rural/suburban residential and forest. Adjacent to Maltby Rd. on the north.
North Bend Pump Station 1.1 acres - Segment 15) See Figure 3.12-3	Vacant/undeveloped field covered with grasses and blackberry bushes. King County Zoning: regional business (within City of North Bend urban growth area - rezoned from general commercial to low-density residential).	Northeast: Adjacent to Cedar Falls Trail on the northeast with open fields and rural residential beyond. Southeast: Undeveloped land zoned multi-family residence by city. Northwest: Undeveloped land zoned regional business by county, and Puget Sound Energy substation. Southwest: USFS North Bend Ranger Station. Suburban residential further west across Thrasher Rd.
Stampede Pump Station* 2.0 acres - Segment 26)	Partially cleared area owned by OPL in Wenatchee National Forest. Kittitas County Zoning: commercial forest.	Forest and recreation (nearby campground). Telephone utility repeater station to the north. John Wayne Trail adjacent to the northeast. Stampede Pass Rd. adjacent to the northwest.
Kittitas Pump Station and Supply/Distribution Terminal 27 acres - Segment 33) See Figure 3.12-4	Irrigated agriculture. Kittitas County Zoning: agriculture (within City of Kittitas urban growth area shown as general industrial).	North/East: Agriculture. South: I-90 freeway with agriculture beyond. West: Two gas stations/cafe, adjacent to Badger Pocket Rd. and I-90 freeway interchange.
Beverly-Burke Pump Station* 2.0 acres - Segment 33)	Uncultivated rangeland. Grant County Zoning: Agriculture.	Uncultivated rangeland and agriculture. Adjacent to circular irrigation agriculture to south and Beverly-Burke Rd. to north.
Orthello Pump Station* 2.0 acres - Segment 33)	Agriculture. Adams County Zoning: Agriculture.	Agriculture (orchards). Adjacent to irrigation pond on the east and Mound Rd. on the west.

INSERT FIGURE 3-12.3

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The Beverly-Burke site is uncultivated rangeland situated on Beverly-Burke Road, surrounded by rangeland and agricultural land. The Othello site is agricultural land situated on Mound Road and surrounded by agricultural land, including orchard crops and an irrigation pond.

Other above-ground structures include block valves along the pipeline and a metering station at the Northwest Terminalling Facility in Pasco, an existing facility in an industrial area. The block valves would require a 9.1 by 12.2 m (30- by 40-foot) area and would be located within the construction corridor, which includes existing and disturbed ROW and approximately 103 km (66 miles) of new corridor extending primarily through agricultural land.

No above-ground structures are proposed to be located within any 100-year floodplain.

3.12.1.3 Relevant Federal and State Plans and Guidelines

The pipeline corridor extends through lands managed by federal and state agencies. Plans, guidelines, projects, or legislation that are relevant to the proposal include:

- # Mt. Baker -Snoqualmie National Forest Land and Resource Management Plan (USFS)
- # Wenatchee National Forest Land and Resource Management Plan (USFS)
- # Bureau of Land Management's (BLM) Spokane District Management Plan
- # Snoqualmie Pass Adaptive Management Area Plan (USFS/USFWS)
- # Columbia River Basin Ecosystem Management Project Eastside Plan (USFS/BLM)
- # Bonneville Power Administration Standards and Regulations (BPA)
- # Yakima and Columbia Basin Projects (BOR)
- # Columbia National Wildlife Refuge Manual (USFWS)
- # National Environmental Policy Act
- # Washington State Environmental Policy Act
- # State of Washington Growth Management Act
- # State of Washington Shoreline Management Act

The proposal must be consistent with these plans, including any amendments and other plans or plan provisions they adopt. For example, the Northwest Forest Plan (NFP) seeks to conserve late-successional forest and foster healthy watersheds. It manages habitat for late-successional and old growth forest-related species within the range of the northern spotted owl (USFS/BLM 1994). The NFP amends all USFS land management plans and BLM resource management plans. NFP standards and guidelines apply to projects, permits, and special use authorizations in the geographic area covered by the USFS or BLM plan, including the proposed pipeline. Where standards and guidelines of the NFP conflict with those of individual plans, the more restrictive standard and guideline generally applies. The consistency of the proposal with relevant plans and guidelines is discussed in the **Environmental Consequences** section.

3.12.1.4 Relevant Local Plans

The proposal extends through six counties, primarily within unincorporated land. However, it does fall within four city limits. The county and city jurisdictions are listed below from west to east:

- # Snohomish County
- # King County
- # City of Snoqualmie
- # City of North Bend
- # Kittitas County
- # City of Kittitas
- # Grant County
- # Adams County
- # Franklin County
- # City of Pasco

For each jurisdiction, the land use section of the ASC includes a description of the comprehensive plan, zoning ordinance, and Shoreline Management Master Program and subarea plans (if applicable), as well as relevant policies and land use designations from these documents.

3.12.2 Environmental Consequences

Land use impacts include effects on existing and future land uses on and adjacent to the pipeline corridor, pump stations, and associated facilities. This section also addresses the proposal's consistency with relevant federal, state, and local plans.

3.12.2.1 Proposed Petroleum Product Pipeline

Construction Impacts - Overall Proposal. The construction impacts on existing land uses would be minor except for recreational uses as discussed in Recreation. Most of the construction would occur in undeveloped, sparsely populated rural areas, along or adjacent to existing ROW (e.g., transmission lines, roadways, and trails) or previously disturbed areas. Exceptions are at the western end through Snohomish and King Counties, particularly at the beginning of the pipeline corridor near the Thrasher Pump Station and through the City of North Bend. The proposal would cross Ginkgo State Park, Wanapum Recreation Area, and Getty's Cove campground.

The construction corridor (which includes pipeline, pump station, terminal, and block valve construction) would be approximately 18 m (60 feet) wide along most of the pipeline corridor but would narrow to approximately 10 m (30 to 35 feet) where the pipeline is constructed on trails, park roads, or through residential and developed areas. Land uses that would be sensitive to construction activities include nearby residences, recreation areas, schools, and other sensitive land uses in developed areas.

Construction-related effects on land uses include increased noise, dust, and traffic; potential for inconvenient access; and temporary disturbance to the rural or open space character of some areas. These effects are addressed further in Sections 3.8 Air Quality, 3.9 Noise, 3.10 Traffic and Transportation, 3.13 Agriculture, 3.14 Recreation, and 3.15 Visual Quality and Aesthetics. This impact on land use is considered minor because construction-related effects would be temporary (physical construction activities at any one location typically last 2 weeks) and several measures would be implemented as part of construction to minimize effects on adjacent land uses.

Measures to minimize construction impacts would include limiting construction to daytime hours, using standard muffler systems on equipment, watering construction areas to reduce dust, and controlling construction by reducing the size of the construction corridor and maintaining access to land uses where the construction corridor narrows or is adjacent to public land uses and recreational trails. Construction would not result in changes to existing or future land uses.

Impacts from pipe staging areas and construction yards, which would be outside the construction corridor, would be limited to areas already disturbed and not adjacent to sensitive land uses or environmental features. Pipe would be delivered by train to the construction yards and trucked to the construction corridor.

Construction Impacts - Columbia River Approach Options. There would be no construction impacts to land use on the YTC from the preferred Ginkgo Petrified Forest State Park option because the YTC would not be crossed. Impacts to the Park are discussed in Recreation and would be major during construction.

Under the YTC options considered, construction impacts to the YTC would be minor to moderate (Figure 3.12-1). Military training activities occur as far north as I-90 and about the I-90 boundary. Construction activities, including backfilling after the pipeline is in place at a minimum of 1.2 m (4 feet) below grade, could destabilize soils which could cause heavy vehicles (i.e., tanks) to sink when they dig in and spin. Additionally, construction activities would compromise realistic training by placing artificial restrictions on training activities. If a YTC option were selected, all construction activities would be closely coordinated with the YTC to avoid conflicts between construction and training activities, and to limit future training activities over destabilized soils.

For the option south of and adjacent to I-90 (see Figure 3.12-1), the pipeline would be buried along or under a new gravel road north of the fence line. When the new road is adjacent to the fence, coordination for construction of the road and pipeline with YTC would help minimize impacts and may reduce the need for revegetation. In areas where the slope is too steep for the road, the new road would leave the fence line and pipeline road and return to it where slopes are more suitable.

Construction Impacts - Columbia River Crossing Options. Construction impacts to land uses in the Columbia River vicinity would be similar for all alternate routes and would be minor. Primary land uses include undeveloped open space, rangeland, and agricultural land. The alternate routes would avoid the developed recreation areas, including the Ginkgo Petrified Forest State Park interpretive center, Wanapum Recreation Area, and Gettys Cove Campground and RV. The options closest to the Wanapum and Gettys Cove Campgrounds would avoid the developed facilities, primarily by staying within or adjacent to existing road ROW (i.e., Hunzinger Road and

Wanapum Road). All alternate routes would avoid the unincorporated communities around the river crossing, including Vantage on the west side, north of I-90, and Beverly and Wanapum Village on the east side, south of I-90.

Any construction-related effects on these nearby land uses would be temporary and mitigated by the measures being implemented as part of the proposal (described under **Construction Impacts** - Overall Proposal above).

Operational Impacts - Overall Proposal

Effects on Existing Land Uses. Effects on existing land uses would be minor. Most of the pipeline would be located in undeveloped rural land devoted to natural resource uses (forest and recreation) and agricultural uses (rangeland and crops). Where the pipeline corridor extends through developed areas, it is located in disturbed areas generally within or adjacent to transmission, trail, or road ROW. This includes the western end in Snohomish County where the Thrasher Pump Station and pipeline are entirely within an existing BPA transmission line ROW under electrical wires, and the portion extending through the Cities of Snoqualmie and North Bend where the pipeline is entirely within the existing Cedar Falls Trail ROW. The North Bend Pump Station is on undeveloped land adjacent to the corridor.

There would be minimal land use conversion. Existing forested areas would be cleared and the land converted to utility ROW because the corridor would need to remain visible for inspections. Potential effects from converting forested areas are addressed in the natural resource sections of this EIS (3.3 Botanical Resources, 3.5 Wildlife). Existing land uses could resume where the pipeline crosses recreation or agricultural uses because the pipeline would be at least 1 m (3 to 4 feet) deep, and because it would only extend through crops which can be replanted above the buried pipeline (i.e., avoiding orchards and asparagus fields). Structures would not be allowed on the ROW.

In some areas where portions of larger rural residential or industrial property would be acquired, the land is currently vacant or undeveloped, requiring little or no clearing. Potential loss in property value is addressed in Section 3.16, Socioeconomics.

The proposal would not require removal of any structures. All properties acquired for conversion (i.e., rural residential property) would be with the consent of the property owner¹. Conditions of the ROW agreement would restrict the construction of buildings in the ROW.

Effects on Existing Adjacent Land Uses. Effects from pipeline operation on existing adjacent land uses and people would be negligible because the pipeline would be underground. Land use effects from operating the pump stations and Kittitas Terminal would be negligible to minor. Potential noise effects on wildlife are addressed in Section 3.5.

¹ No property owners are known to be asked to give up a ROW via eminent domain.

Potential impacts from the Thrasher, Stampede, and North Bend Pump Stations include increased noise and decreased visual quality for nearby residents (Thrasher and North Bend), as well as recreationists using the John Wayne Trail (Stampede) and Cedar Falls Trail (North Bend). These issues are addressed in Sections 3.9 Noise, 3.14 Recreation, and 3.15 Visual Quality and Aesthetics. The effects are considered minor because the pump stations would be enclosed and partially buffered by existing vegetation. Additionally, at the North Bend Pump Station, the Puget Sound Energy substation and Thrasher Road are situated between the pump station site and residents to the west. At the Stampede Pump Station, the area is already somewhat disturbed by the adjacent utility station and road/trail crossroads.

Land uses surrounding the Beverly-Burke and Othello Pump Stations are agricultural, and noise and visual effects would be negligible.

The Kittitas Terminal (pump station and storage/distribution facility) would have greater noise and visual effects because it would be a larger facility including truck loading activities. However, the effects are considered minor. Land uses surrounding the Kittitas Terminal are agricultural to the north, west, and east; I-90 freeway and interchange to the south; and highway commercial (two gas stations and cafe) to the immediate northwest. The nearest residence is 579 m (1,900 feet) northeast. The increased noise effects from the truck loading activities on the commercial uses and residence are addressed in Section 3.9, Noise, and the increased visual effects are addressed in Section 3.15, Visual Quality and Aesthetics. The Kittitas Terminal is not considered incompatible with the freeway interchange and commercial uses.

The area in the vicinity of the Kittitas Terminal is already in transition from agricultural to commercial and industrial, as the City of Kittitas expands south toward the freeway. The pump station site and land to the north are within the city's UGA and are being rezoned from agriculture to general industrial. The traffic on I-90 is an existing dominant noise generator. A vegetative buffer zone would be placed along the terminal boundaries to reduce noise and minimize visual effects.

Effects on Future Land Uses. Future land uses directly above the pipeline may be restricted to exclude certain development, some agricultural production (orchards), structures, or other activities that could involve excavation or disturbance of the pipeline. These effects are considered minor because most of the pipeline is in already disturbed areas within or adjacent to existing ROW where future development is already limited and because most uses of the ROW will be allowed. In addition, all property owners (including residential property owners) to date are providing their consent. Effects on future agricultural production are addressed in Section 3.13, Agriculture.

Future land uses on and adjacent to pump stations may be restricted due to noise generated by the pump stations and truck loading activities at the Kittitas Terminal. These effects are considered minor for reasons described below.

Thrasher Pump Station. At the Thrasher Pump Station, future development onsite is already restricted because it is within an existing BPA ROW. Future development offsite is already restricted by the existing zoning (suburban agriculture, 0.4 ha or 1 acre) and existing suburban/rural residences. Most of the area appears cleared and built out, although there is still

relatively dense forest to the west. Potential noise effects on future residences would be minor because the pump station would be enclosed. Additionally, the low-density zoning restricts development and provides opportunities to construct residences further away from the pump station.

North Bend Pump Station. The North Bend Pump Station site and adjacent land to the northwest are unincorporated and zoned by the county as regional business. This undeveloped land is within the city's UGA and shown on city maps as low-density residential (formerly general commercial).

The effects of the pump station on future development of this adjacent land for business or commercial uses would be minor, because the land is already surrounded by the Puget Sound Energy substation to the northwest, USFS ranger station to the south, and Cedar Falls Trail to the north. In addition, the pump station would be situated on the east side of the site, maintaining access to Thrasher Road. The pump station would be enclosed to minimize noise.

The effects of the pump station on future low-density residential development (as identified by the city for this unincorporated area) of adjacent land would be moderate. Adjacent land is already bounded by the power substation to the northwest and USFS station to the south; the pump station and access road would further ~~enclose~~ such residential development, rather than allowing a transition from low-density residential to the multifamily residences that may be constructed in the future to the southeast. This could also lower the property value of future low-density development in this area.

However, the loss of 0.6 ha (1.5 acres) for either low-density residential or commercial development would be minor because there are other areas within the city's UGA with these designations. The property owners of the adjacent land to the northwest support the regional business designation but oppose the residential designation of their property. (Smith pers. comm.)

The undeveloped land adjacent to the North Bend Pump Station on the southeast side is within the city limits and is currently the last undeveloped land zoned multifamily residential within the city limits (Smith pers. comm.). The effects of the pump station on development potential of this property would be minor because the pump station would be enclosed, minimizing noise effects. Maintaining the existing vegetative buffer or establishing a new one would minimize visual effects.

Stampede Pump Station. The Stampede Pump Station site is located where Stampede Pass Road bisects the John Wayne Trail in Kittitas County. The site is on private property owned by OPL. County zoning is for commercial forest, which also restricts future use and development for private property. This zoning permits ~~utility~~ substations as a conditional use. The pump station would be enclosed to protect the equipment from winter weather, which would minimize noise effects on continued recreational use of the adjacent John Wayne Trail.

Kittitas Terminal. At the Kittitas Terminal (pump station and storage/distribution facility), the unincorporated lands onsite and adjacent to the north and east are zoned agriculture. Effects on future land uses would be negligible because future development on the site and to the north and east is already restricted by the agricultural zoning and to the south by the existing freeway. Agricultural use of the site would be eliminated by the terminal.

The adjacent property to the west, including that occupied by the two gas stations and cafe, is in the City of Kittitas. The city is trying to incorporate the terminal site and has designated it general industrial within the city's UGA. The county has accepted this designation and will consider this revision as part of their comprehensive plan amendments. After the comprehensive plan is revised, a request would be submitted to rezone the site from agriculture to general industrial. Effects with and without the rezone are considered minor because the terminal would be compatible with either agricultural or industrial use.

Effects on future land uses to the west would be minor. The area is already dominated by highway noise, and a vegetation buffer would be planted on the perimeter to reduce visual and noise effects. Future land uses in the general industrial and highway commercial zones would not likely be altered as a result of this proposal. Effects on agricultural use are also addressed in Section 3.13, Agriculture.

Beverly-Burke and Othello Pump Stations. At the Beverly-Burke and Othello Pump Station sites, effects on future land uses are considered negligible because future development onsite and adjacent to the site is already restricted by the agricultural zoning, and there are no nearby residential land uses. Effects on agricultural use are addressed in Section 3.13, Agriculture.

Consistency with Relevant Federal and State Plans and Guidelines. The proposal was evaluated for consistency with relevant federal and state plans and authorities, which provide direction on management of federal and state lands through which it extends. These lands are managed by a number of agencies, including the USFS, BLM, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington State Parks and Recreation, and Bonneville Power Administration. Not all of the plans have been formally adopted by the respective agencies. Nevertheless, as part of the proposal, OPL would coordinate with these agencies during project planning and prior to construction to minimize potential environmental effects, mitigate the general disruption caused by construction activities, and ensure compliance with the intent of these plans and relevant regulations.

At this stage in project planning, a **Consistent** determination is given if the proposal is determined to be consistent or not inconsistent, or if the plan is silent regarding petroleum pipelines or utility lines. **Inconsistent** determinations are given if the proposal was not consistent with any part of any standards and guidelines of the plans being evaluated.

The current proposal is inconsistent with the Mt. Baker-Snoqualmie National Forest Land and Resource Management Plan (MBSLRMP) as amended by the NFP. The proposal is not inconsistent with most other adopted federal and state plans (Table 3.12-2). However, consistency in most cases depends on ongoing coordination with agency staff and may depend on mitigation identified in the natural resources analyses (Sections 3.2 Geology, Soils, and Seismicity; 3.3 Botanical Resources; 3.4 Wetlands; 3.5 Wildlife; 3.6 Water; and 3.7 Fisheries). The discussion below describes the justifications behind these determinations.

Mt. Baker-Snoqualmie National Forest Land and Resource Management Plan. The current project proposal would require removing standing second-growth trees (largest

diameters are approximately 36 cm [14 inches]) on lands designated as Late-Successional Reserves (LSR) adjacent to the Humpback Creek crossing (crossing 78 on ASC map atlas page 23). Though the trees and the stand are not considered old-growth, the Standards and Guidelines (S&Gs) in the Record of Decision (ROD, page C-17) for the NFP state that new developments in an LSR will be located to avoid degradation of habitat and adverse effects on identified late-successional species (USFS/BLM 1994) .

The project may possibly be inconsistent with other S&Gs as well. The ASC does not provide enough specific information to evaluate the consistency of stream crossing construction methods within Riparian Reserves, and does not completely consider site-specific findings and recommendations detailed in USFS watershed analyses (South Fork Snoqualmie River; Upper Yakima River) as directed by the NFP (Mt. Baker-Snoqualmie National Forest 1995, Wenatchee National Forest 1997).

An **Inconsistent** determination at this stage in the planning process does not necessarily indicate that the project is prohibited on USFS or BLM lands, nor is it even prohibited at a site like Humpback Creek. The ROD provides for approval of new developments like a pipeline when they are reviewed and approved on a case-by-case basis. As with other federal and state plans mentioned above, consistency may depend on coordination with agency staff and on avoidance or mitigation measures identified in the natural resources analyses. A review of the project will be made by USFS and BLM decisionmakers and included in the Final EIS. The ROD, signed and effective with the publication of the Final EIS for this project, will record the consistency determination.

Other Plans. The National Environmental Policy Act (NEPA), Washington State Environmental Policy Act (SEPA), State of Washington Growth Management Act (GMA), and the State of Washington Shorelines Management Act are satisfied either through this EIS or through local plans as identified in Table 3.12-2.

The Bureau of Reclamation's Yakima and Columbia Basin Projects, and the Columbia River Basin Ecosystem Management Project and the Eastside Plans under development by the USFS and BLM, have no formally adopted planning documents. In these cases, consistency with agency plans is not applicable or is not required. However, OPL would coordinate with agency staff to minimize potential impacts of the project on riparian habitat and other natural resources protected by agency S&Gs (Table 3.12-2).

The proposed pipeline would cross Columbia National Wildlife Refuge lands adjacent to Highway 26 between MP 173 and MP 174 and at MP 182 managed by the U.S. Fish and Wildlife Service (USFWS). Although consistency of the proposal with the Refuge's Manual and management authority is anticipated, OPL will need to present a thorough mitigation and monitoring plan to demonstrate the project has fully compensated for unavoidable impacts. Consultations with the USFWS will also be required to determine whether the proposal adversely modifies habitat critical to threatened, endangered, and special-status species (Table 3.12-2).

Table 3.12-2. Evaluation of Proposal's Consistency with Relevant Federal and State Plans

Relevant Plan (Agency)	Draft Consistency/ Determination	Evaluation/Comments and Guidelines
Mt. Baker-Snoqualmie National Forest Land and Resource Management Plan (USFS)	Inconsistent	Plan is amended by the Northwest Forest Plan (NFP) and adopts the Alpine Lakes Area Land Management Plan in whole. Not inconsistent as evaluated against goals of relevant land use classifications and policies on private use of lands and on siting utility corridors. Although NFP standards and guidelines (S&Gs) allow utility uses on USFS/BLM lands, the proposal is inconsistent as it would harvest trees in late-successional reserves near Humpback Creek. Proposal may also be inconsistent with other riparian standards and guidelines.
Wenatchee National Forest Land and Resource Management Plan (USFS)	Consistent	Plan is amended by the NFP. No specific policies on petroleum pipelines, but S&Gs allow utility uses on forest land. Not inconsistent as evaluated against goals of relevant land use classifications and policies on special use management and siting utility corridors.
Snoqualmie Pass Adaptive Management Area Plan (USFS/USFWS)	Consistent	Plan is an offshoot of the NFP. Not inconsistent (i.e., it is neutral or beneficial) with objectives for late-successional forest and riparian reserves within the adaptive management area.
Bureau of Land Management (BLM) Spokane District Resource Management Plan	Consistent	Plan is amended by the NFP. No inconsistencies evaluated against policy for utility and/or transportation corridors.
Bonneville Power Administration Standards and Regulations (BPA)	Consistent	Allows joint use of BPA transmission ROW for pipeline installation within established regulations.
Columbia River Basin Ecosystem Management Project - Eastside Plan (USFS/BLM)	N/A	Currently (1998) no formal planning document adopted. Coordination with USFS/BLM staff would minimize potential impacts concerning the protection of riparian habitat and other relevant USFS/BLM standards and objectives.
Yakima and Columbia Basin Projects (BOR)	N/A	Currently (1998) no formal planning document adopted. Coordination with BOR staff would minimize potential conflicts with relevant BOR standards and guidelines.
Columbia National Wildlife Refuge (USFWS)	Consistent	OPL would coordinate with USFWS staff. Consistency dependent on OPL mitigation plan and TES consultations.
National Environmental Policy Act (NEPA) and Washington State Environmental Policy Act (SEPA)	Consistent	This EIS is being prepared as a joint NEPA/SEPA document under the USFS, federal lead agency, and Washington Energy Facility Site Evaluation Council (EFSEC), state lead agency.
State of Washington Growth Management Act (GMA)	Varies	Snohomish, King, Kittitas, Grant, and Franklin Counties and Cities of Snoqualmie, North Bend, Kittitas, and Pasco are required to prepare comprehensive plans in compliance with the GMA (refer to Table 3.12-3).
State of Washington Shoreline Management Act	Consistent	Addressed under local plans (refer to Table 3.12-3).
Note: "Consistent" determination was given if the proposal was determined consistent or not inconsistent, or if the plan was silent regarding petroleum pipelines or utility lines. OPL coordination with the relevant agencies during project planning and prior to construction to minimize potential environmental effects and mitigate the general disruption caused by construction activities supports a consistent determination. "Inconsistent" was given if the proposal was not consistent with any of the standards and guidelines being evaluated.		

The MBSLRMP, in addition to being amended by the NFP, adopted in whole the Alpine Lakes Area Land Management Plan. Similar to the MBSLRMP, the Wenatchee National Forest Land and Resource Management Plan is also amended by the NFP. A third plan, the Snoqualmie Pass Adaptive Management Area Plan, governs USFS checkerboard lands east of the Cascade Crest near Snoqualmie Pass, with a decision to manage them primarily as Late-Successional Reserves (LSR). As the proposal would stay primarily in established ROWs and would not harvest trees in these areas, consistency with these plans is anticipated. However, as described under the NFP above, a consistency determination is dependent on a case-specific review and approval to be executed in the ROD after the Final EIS (Table 3.12-2).

The Spokane District Resource Management Plan governs all BLM lands in Washington State. As evaluated against its policy for utility and transportation corridors, the proposal is believed to be not inconsistent with BLM direction. Similarly, a review of BPA standards and regulations indicates joint use of BPA transmission ROWs for pipeline installation is permissible in the segments identified in the proposal. OPL would coordinate with these agencies to maintain consistency with these guidelines (Table 3.12-2).

In addition to the above plans, OPL must submit and comply with a construction/operation maintenance plan (Plan of Development). This plan describes activities on all federal lands and the mitigation required by federal agencies managing those lands.

Consistency with Relevant Local Plans. The proposal's consistency with relevant local plans (including the zoning code, comprehensive plan, and shoreline master plan) was evaluated for the six counties and four cities through which the proposal extends. The evaluation is summarized in Table 3.12-3, with additional information provided in the land use section of the ASC.

The proposal is considered consistent with the relevant local plans in all jurisdictions, except Kittitas County and Grant County as described below. This impact is considered minor because, in most cases, petroleum pipelines and associated facilities are not specifically addressed in the plans, yet similar uses are allowed, and because administrative processes are already being implemented with the local agencies to resolve potential inconsistencies. These processes would likely be completed before the end of the environmental review process.

Kittitas County. The proposal (in its entirety) would be inconsistent with the zoning code or comprehensive plan, but would be a permitted use in the Shoreline Master Program. In the zoning code, petroleum pipelines are not listed as permitted or specified as a conditional use. A prohibited use is defined as a use not specifically permitted. However, the zoning code allows for overriding determinations by the county zoning administrator (planning director), whereby property owners are notified and appeals are forwarded to the County Board of Adjustment for final determination.

A zoning code text amendment to bring the pipeline component of the proposal into compliance with current zoning regulations has been approved in draft form by county commissioners and is expected to be adopted in 1998. The text amendment would allow Special Utilities (pipeline and pump stations) and Associated Facilities (terminal or storage/distribution facility) as a conditional use.

Table 3.12-3 Proposal's Consistency with Relevant Local Plans

Relevant Plan	Consistency Determination ¹	Evaluation/Comments
Snohomish County (Thrasher Pump Station, pipeline)	Consistent	Zoning Code: Permitted use in all zoning designations. Comprehensive Plan: No specific policies on petroleum pipelines or pump stations (evaluated with general guidelines on siting of private utility systems). Shoreline Master Plan: Permitted use.
King County (pipeline)	Consistent	Zoning Code: Permitted use in all zoning designations. Comprehensive Plan: No specific policies on petroleum pipelines or pump stations (evaluated against policies for facilities and services, energy and telecommunications). Shoreline Master Plan: Permitted use.
City of Snoqualmie (pipeline)	Consistent	Zoning Code: Permitted use in all zoning designations. Comprehensive Plan: No specific policies on petroleum pipelines or pump stations (evaluated against policies in land use, parks and recreation, and utilities elements). Shoreline Master Plan: Permitted as conditional use.
City of North Bend (pipeline, North Bend Pump Station)	Consistent	Zoning Code: Permitted use in all zoning designations pursuant to conditional use criteria. Comprehensive Plan: No specific policies on petroleum pipelines or pump stations (evaluated against policies in utilities element). Shoreline Master Plan: Permitted as conditional use.
Kittitas County (pipeline, Stampede Pump Station, Kittitas Terminal)	Inconsistent ^f	Zoning Code: Petroleum pipelines are not listed as a permitted or conditional use in the zoning code. Stampede Pump Station allowed in commercial forest zone. Kittitas Terminal not allowed in current agricultural zone (but would be permitted as a conditional use in the proposed general industrial zone). Comprehensive Plan: No specific policies on petroleum pipelines or pump stations, and no regulations on the hazardous liquid pipelines addressed in the utilities element. Pump station and pipeline (evaluated as essential public facilities) would be consistent with land use and utility policies. Terminal (evaluated as a new industrial development) would be consistent with utility policies but <u>not</u> with agricultural policies (agricultural policies would not apply if terminal site is rezoned industrial). Shoreline Master Plan: Permitted use.
City of Kittitas (pipeline)	Consistent	Zoning: Permitted pursuant to conditional use criteria. Comprehensive Plan: Adopted June 1997, it does not specifically address petroleum pipelines. Shoreline Master Plan: Not applicable.
Grant County (pipeline, Beverly-Burke Pump Station)	Inconsistent ^f	Zoning: Petroleum pipelines and pump stations are not specifically listed as permitted uses, but similar uses are permitted in some of the zones. Comprehensive Plan: Being updated. Determined consistent with the utilities and energy policies according to county staff. Shoreline Master Plan: Permitted as conditional use.
Adams County	Consistent	Zoning Code: Does not include a definition of a pipeline, utility or transmission line. County indicated they

Relevant Plan	Consistency Determination ¹	Evaluation/Comments
(pipeline, Othello Pump Station)		would consider the proposal under Unclassified uses and permit it like a conditional use. Comprehensive Plan: Being updated. County uses zoning code for land use determinations. Shoreline Master Plan: Not applicable.
Franklin County (pipeline)	Consistent	Zoning Code: Petroleum pipelines not specifically listed. County indicated pipelines considered transmission lines, which are permitted as a conditional use in all zones. Comprehensive Plan: No specific policies regarding petroleum pipelines (evaluated against utilities element). Shoreline Master Plan: Permitted as conditional use.
City of Pasco (pipeline)	Consistent	Zoning Code: Petroleum pipelines not specifically listed in the zoning designations (silent). Comprehensive Plan: No specific policies regarding petroleum pipelines (silent). Shoreline Master Plan: Not applicable.
<p>Source: This information was developed based on review of the relevant plans and coordination with local planning staff. Detailed discussion of the relevant plans and rationale for consistency determination are in the ASC land use section.</p> <p>¹ "Consistent" determination was given if the proposal was determined consistent or not inconsistent, or if the plan was silent regarding petroleum pipelines or utility lines. "Inconsistent" was given if the proposal was not consistent with any one of the plans being evaluated.</p> <p>² Uses not specifically permitted are considered prohibited. However, the Zoning Administrator makes the determination to allow the use. The terminal site is unincorporated land within the City of Kittitas Urban Growth Area (UGA) and designated in the city comprehensive plan as general industrial. Kittitas County currently zones this area as agricultural, but is expected to adopt the Kittitas UGA and amend their comprehensive plan to general industrial. A rezone would be requested, and this rezone would allow Special Utilities (pipeline and pump station) and Associated Facilities (terminal) as a conditional use, and would deem the agricultural policies in the comprehensive plan inapplicable.</p> <p>³ Public utilities are permitted as a conditional use in agricultural zone, but are not specifically listed as a permitted use for industrial or open space zones. However, certain uses for public necessity/convenience may be permitted upon approval by the County Board of Adjustment (i.e., petroleum bulk plants, storage, and refining facilities are permitted in industrial zone). A request for special permits or text amendments has been submitted.</p>		

The Stampede Pump Station (considered a **A**utility substation[®]) would be permitted as a conditional use in the commercial forest zone.

The Kittitas Terminal (pump station and storage/distribution facility) is proposed for a site currently zoned Agricultural-20. The Kittitas Terminal is inconsistent with the zoning code and would not be a permitted use in the Agricultural-20 zone. The pump station component (considered a utility substation) would be permitted in this zone pursuant to conditional use criteria, but the terminal is not listed as a permitted or conditional use and, therefore, is considered prohibited. However, this site is on unincorporated land within the City of Kittitas UGA and designated in the city comprehensive plan as general industrial. Once Kittitas County has adopted the Kittitas UGA (expected in 1998), amended the county's comprehensive plan to be consistent with the city's, and finalized the proposed zoning text amendment, a rezone to general industrial would be made which would allow the terminal as a conditional use.

The comprehensive plan does not include specific policies on petroleum pipelines, pump stations, or terminal facilities. Hazardous liquid pipelines are addressed in the utilities element, but there are no regulations. When evaluated as essential public facilities, the pump station and pipeline are considered consistent with the land use and utility policies. When evaluated as a new industrial development, the terminal would be considered consistent with utility policies, but not with the agricultural policies. However, if the terminal site is rezoned general industrial as anticipated, the agricultural policies would not apply and the terminal would be considered consistent.

Therefore, the proposal is considered inconsistent with the zoning code and comprehensive plan unless the Kittitas Terminal site is rezoned general industrial and the zoning code is amended to specify petroleum pipelines as an allowed use or permitted conditional use.

Grant County. The proposal (pipeline and Beverly-Burke Pump Station) is not considered consistent with the zoning code, but is considered consistent with the comprehensive plan and would be permitted as a conditional use in the Shoreline Master Program. The comprehensive plan is being updated (the prior comprehensive plan was written in 1966 and is outdated). The county has indicated that the pipeline is consistent and in compliance with the comprehensive plan goals relative to utilities and energy (Lambro pers. comm.).

In the zoning code, petroleum pipelines and pump stations are not specifically listed as permitted uses, but similar uses are permitted in some of the zones. The pipeline crosses the agriculture, light industrial, heavy industrial, and open space recreation zones; and the Beverly-Burke Pump Station is in the agriculture zone. Although not specifically listed as permitted uses in the agriculture zone, the pipeline and pump station could be considered utility functions and would therefore be a permitted use in the agriculture zone. Although petroleum pipelines are not specifically listed as a permitted use in the industrial zones, permitted uses include fuel oil distributor (retail), petroleum bulk plants, and petroleum storage and/or refining facilities. A petroleum products pipeline is not listed as a permitted use in the open space recreation zone.

By definition, prohibited uses are those uses not specifically enumerated as permitted uses. The county is currently processing a request for a special permit which allows unclassified uses or a zoning code amendment to specifically permit utility lines either outright or by conditional use in

all zones. Because the county determined the pipeline consistent with the comprehensive plan, a zoning code text amendment may be appropriate to specifically permit utility and energy transmission lines either outright or by conditional use in all zones.

Operational Impacts - Columbia River Approach Options. For the proposed route through Ginkgo State Park, the pipeline would be periodically inspected via driving/walking surveys. The pipeline would be clearly marked, as discussed in Chapter 2. No land use impacts are anticipated for this proposed route.

Operational impacts on the YTC would be minor to moderate for options that would be located in existing northern expansion training areas (Figure 3.12-1). Because installation of the pipeline would destabilize the soil on the affected areas, training activities involving heavy equipment (i.e., tanks) that dig in and spin would be at risk of sinking (particularly in winter and spring when the soils are softer from rain) and possibly rupturing the pipeline. Markers to identify pipeline location would be installed but may be difficult to see during night training. This impact is considered minor because if such an option were selected, OPL would coordinate with the YTC to ensure adequate markers are installed so the pipeline location can be identified even at night and avoided by heavy equipment.

Additionally, training activities as a whole would be compromised by placing additional artificial restrictions (not relevant in a real combat situation) in the northern expansion area (see AConflicts with the YTC label on Figure 3.12-1). The purpose of acquiring the northern expansion area was to provide training opportunities that are relatively free of constraints, particularly the historical and natural resource constraints at the historical YTC. Although an alternative route in this area would only directly affect 1 to 2 percent of the northern expansion area, it would negatively affect 20 percent of the area used for training with heavy equipment by placing additional administrative and tactical restraints (Krueger pers. comm.). Other artificial constraints at the YTC that restrict training activities include I-90, farms in Badger Pocket, John Wayne Trail, Ginkgo State Park, Saddle Mountains, and other normal environmental constraints (i.e., avoiding creeks). The impact of adding another artificial restriction to training activities is considered moderate. Although it would not jeopardize national security, it would conflict with the intent of acquiring the northern expansion area, and it is not feasible to use other areas on the YTC or acquire land outside the YTC for similar training activities.

For the option south of and adjacent to I-90 there would be a beneficial effect for YTC (see ABenefits YTC label on Figure 3.12-1). As part of this option, a gravel road would be installed above the pipeline rather than revegetating the corridor, which would provide fire control for YTC.

Operational Impacts - Columbia River Crossing Options. Operational impacts on the land uses near the Columbia River vicinity would be minor or negligible for reasons similar to those described under AConstruction Impacts - Columbia River Crossing Options. There are no above-ground facilities proposed in this area. Existing land uses could continue to operate, would not be affected by the pipeline, and would not disrupt pipeline operation. Future land uses in this area are restricted by the existing state park ownership, as well as BLM and Bureau of Reclamation.

Cumulative Impacts. Cumulative impacts on land use are considered minor. There are potential cumulative effects on training activities at the Yakima Training Center if an option to cross the YTC were selected. The pipeline would place additional artificial restrictions, primarily on training maneuvers and simulation involving heavy vehicles, on a substantial portion of the northern expansion training area, which was acquired for its lack of restrictions. There are no lands available elsewhere on YTC due to existing restrictions, and acquiring additional land for training is difficult and unlikely.

Additionally, there could be a cumulative effect at the Kittitas Terminal from adding another non-agricultural land use to and are transitioning from agriculture to commercial and industrial land uses. This is considered minor because the site is within the City of Kittitas urban growth area which designates the site and land to the north and west for non-agricultural uses, and the area has been in transition as the City of Kittitas expands south to I-90. Cumulative effects on other land uses are negligible.

3.12.2.2 No Action

Under the No Action Alternative, no new pipeline and associated facilities would be constructed. In general, there would be no effects to existing or planned land uses and no inconsistencies with relevant plans and policies. Under No Action, the number of barges and trucks would likely double over the next 30 years. This may increase the demand for supporting facilities in ports and along the highway (i.e., gas stations, mini-marts, rest stops). The land use effect of developing such facilities is considered minor.

3.12.3 Additional Proposed Mitigation Measures

No additional mitigation measures, beyond those included as part of the project by the applicant, are proposed.

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